Collecting and Sharing Data on **bee health** Towards a European Bee **Partnership**

BRUSSELS, 26 JUNE '17

Main conclusions

Discussion Group 2

Better data collection and access for better bee health risk assessment

efsa European Food Safety Authority

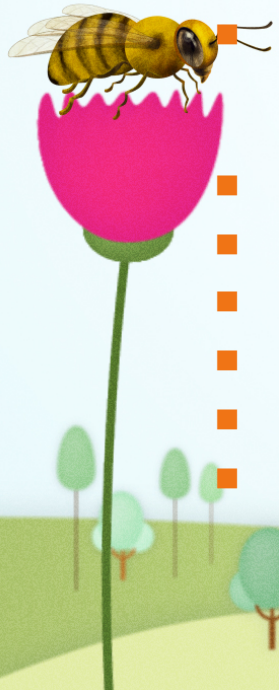
European Professional Beekeepers Association e.p.b.a.

copa cogeca european farmers european agri-cooperatives

European Crop Protection

European Beekeeping Coordination

DATA AVAILABILITY AND ACCESS (FOR BEE HEALTH ASSESSMENT)



- Crop coverage from subsidies data
  - Make public access to detailled data compulsory
  - Centralise this type of data at EU level
  - In the UK available crop mapping of landscape
  - Speed up to get data on crop seasonality and time
- Pesticides usage available at Pesticides Sustainability Directive (sales only) data EUROSTAT
  - Decentralise data, a framework to get the data at national level
- Weather/climate from JRC/E-OBS/Weather underground source
- varroa mite infestation level and beekeeping practices
- Density of bee colonies at MS level
- Honey bee health (mortality)
- Emission data/EC
- Farms structure database to be updated more often

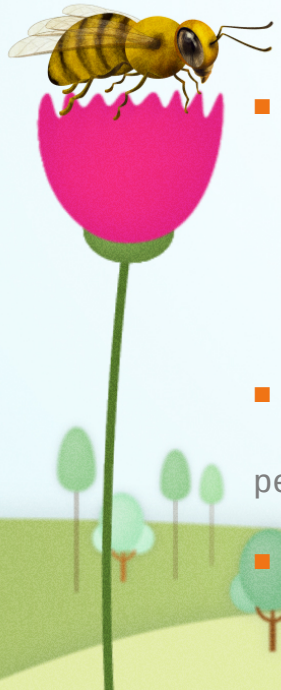
(FIELD) DATA COLLECTION - TOOLS

- Hi Tech tools
  - Computer assisted counting / Image processing
  - Non-invasive monitoring (weighting, video analyses, bee counters, sensors (e.g. temperature HR, vibrations, bioacoustics, etc)
  - Harmonic radar
  - Waggle dance decoding
  - Softwares for beekeeping/farmer/veterinarian management
  - Social media

- Others
  - Questionnaires for baselines…
  - Capacity building (people/network to get the data)

DATA COLLATION AND MANAGEMENT (FOR SHARING)

- Beekepers
  - early warning information to mitigate, to act on colonies; see beebase example where good practical information to beekeepers and in return they get useful info; large datasets could stimulate networking capacity; the results of all this data collection effort needs to be beneficial otherwise beekeepers will not get involved anymore: updating system



- Scientists
  - Very large of reliable and clean data (like in human epidemiol monitoring); reproducibility (if data open, someone else can come up with the same results?); more dataset more confident you can be in the results and conclusions made; Reliability info when from various sources? There are ranges of scenarios covering the range of situations

- Farmers:

  Extension services for the farmers to provide advice; EC should make pesticides data available

- Industry
  - More robust data for better understand and for pre/post marketing; for good stewardship (good managing)

DATA ANALYSIS

Stakeholders	What to predict?
Beekeepers	resource availability; probability of intoxications; Pathogen disease prevalence (AFB); early warning
Farmers	Pollination deficit
Industry	RA robust and realistic and to improve stewardship
Scientists	Mechanisms related to the food/landscape with the colonies
RA/RM	Flexible access to the data to make specific queries Resilience?

DATA COMMUNICATION (FOR UNDERSTANDING)

Stakeholders	How we want the results of the analyses to be communicated?
Beekeepers	Personal communication to compare with the different levels (region/national…) and localisation; have the choice of the information you want to select to get the analysis; groups of experts/well educated people to update beekeepers with new scientifically based knowledge; communications in specialised magazines
Farmers	Same as to beekeepers: how they can provide support to make it sustainable; extension centers (specialist advisers)
RA/RM	Scenarios including beekeeping practices (how the colonies are managed); online communication with filters GLP (ie useable for RA); data meets the PGs